

## Region 1 FY 2014 Invasive Species Control Program Proposal

**Refuge/complex name:** Columbia National Wildlife Refuge (Mid-Columbia River NWR Complex)

**Project title:** MP31 Phragmites Control

**Total amount requested:** \$12,650

**Project description:**

Target Invasive Species: Common Reed (*Phragmites australis*; non-native strain)

Infested Acres: approx. 12 acres in distinct patches

Treatment Acres: approx. 12 acres

The non-native strain of Phragmites (aka, common reed) is a highly aggressive invader of moist soil and riparian areas. It has limited forage or cover habitat value and is capable of out-competing most native species, including cattails, bulrush, and willows. A wildfire in 2012 that encompassed a portion of the Lower Crab Creek drainage (the MP31 Fire) removed most of the native vegetation along the creek. Phragmites had been present along this stretch of the creek before the fire but had been very limited. The refuge implemented a Burned Area Rehabilitation plan to rehab the habitats within the fire perimeter. This plan had been funded through the BAER program through 2013. However, planning personnel did not anticipate the level of response of the Phragmites. Most of the moist soil flats along the burned area of the creek are now near monocultures of Phragmites, degrading the native habitat values of the area, preventing further rehab work and endangering work already performed. BAR funding is no longer available to treat this infestation.

The proposed project will be to chemically treat these Phragmites infestations through targeted broadcast (Clearcast® + glyphosate) and wipe applications (glyphosate), to open the sites for reinvasion of the moist soil flats by native species (primarily cattail and bulrush), to protect the rehabilitation treatments already undertaken (e.g., native seeding, native tree installation), and to prepare the sites for future rehabilitation efforts as necessary. Large populations of both cattails and bulrush can be found immediately upstream, while Phragmites infestations are generally limited in this area. Significant efforts have been made through the BAR plan, efforts that are likely to fail unless the Phragmites is controlled.

**Distinct project with well-defined objectives (10 points):**

While Phragmites is unfortunately relatively common on the Complex, it is relatively rare in the proposed project area. This wider commonality is actually what makes this project fairly unique. **Phragmites is not common in Lower Crab Creek, and treating these patches would help to keep it that way.** Complex personnel have a lot of experience in effectively treating Phragmites, and have most of the necessary equipment to treat an infestation along Lower Crab Creek. **Further, the Complex has received a NFWF grant to partially fund a seasonal Invasives Strike Team through 2015, tasked to target infestations that otherwise would go untreated.** However, this infestation is not among those budgeted in that grant, and base funds are almost entirely locked up in other projects. The proposal would in part help to offset costs to be able to task this team with treating the Phragmites.

**Comment [BF1]:** A distinct project, but what are the objectives? What level of control do they anticipate accomplishing by when?

**Potential for maximum control/Likelihood of success (10 points):**

While Phragmites is an aggressive invader of native habitats, intact or otherwise, it is relatively limited in the Lower Crab Creek drainage area. **Assuming proper application, control or eradication of this invader within the proposed project area is likely within 1-2 years.** Aggressive native invaders (including bulrush, cattail, Basin wildrye, and saltgrass) can all be found immediately adjacent or upstream of the project area, meaning all are poised to readily reinvade behind the Phragmites. Further, all of the identified

natives can be easily seeded in to the project by hand. The Complex is fortunate enough to have dedicated volunteers that have readily jumped at this kind of activity in the past.

**Biological benefit to priority species or BIDEH (10 points):**

Left unchecked the Phragmites will likely cause the complete failure of the undertaken BAR efforts. Further, it will completely displace most of the native vegetation along this area of Lower Crab Creek, and will serve as a source population for infesting other moist soil and pothole areas in this area of the refuge. Phragmites has limited forage and cover value for native species, including migratory waterfowl, secretive marshbirds, migratory songbirds, and amphibians. All of these species were common in the project area before the fire, and still have a significant presence. Removal of the Phragmites, coupled with the undertaken BAR treatments and re-establishment of native vegetation, should actually eventually increase the value of this area's habitats for these species over the pre-fire condition.

**Sustainability (10 points):**

All proposed activities should be completed within the current fiscal year. Monitoring will be done to determine what, if any, follow-up treatments will need to be done in following years.

**Monitoring to document and evaluate project success (10 points):**

Monitoring will be accomplished through direct observation of treated infestations, concurrent to monitoring being conducted for the BAR treatments. Photopoints will be established at key sites to monitor changes over time. Infestations will be GPS'ed using hand-held Trimble® units and a customized data dictionary in TerraSync®. These GPS files will be imported into the Complex's GIS for long-term documentation and monitoring. Treated sites will be revisited in subsequent years and retreatments will be made as needed.

**Comment [BF2]:** Yes! This is the kind of information I want!

**Budget: \$12,650**

Personnel: \$7,150

Travel: \$2,400

Materials/Equipment: \$3,100

The Complex will be forming another Invasives Strike Team for 2014 to target other projects on the Complex. The requested personnel funds will allow for tasking the Strike Team to target the proposed infestation. These funds will also help to cover the development of any requisite NPDES permits. The travel expenses will cover fuel and vehicle costs to travel to the infested refuges and sites. The Strike Team is to be based out of the Burbank office. The MP31 infestations are up to 200 miles round-trip from Burbank. The materials and equipment funds will cover supplies, sprayer/wiper parts, and chemical (Clearcast® ain't cheap).

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